

## REMARKS

Reconsideration and allowance of the pending claims in view of the foregoing amendments and the following remarks are respectfully requested.

By this Amendment, Claims 6 and 20 are currently canceled without prejudice or disclaimer. Thus, Claims 1-5, 19, 21-38, and 40-43 remain pending. Favorable consideration is respectfully requested.

### 35 U.S.C. § 102

Claims 1, 19, and 43 have again been rejected under 35 U.S.C. §102(e) as being unpatentable over U.S. Patent No. 6,292,827 to Raz (hereafter "Raz"). Applicant respectfully traverses this rejection, and further requests that this rejection be reconsidered and withdrawn.

Raz is directed to information transfer systems and method with dynamic distribution of data, control and management of information (see, Title). Raz discusses a forms generator/processor that provides the ability to scan paper-based forms and convert them to HTML documents using OCR technology (see, col. 12, lines 37-40). Form blanks are automatically converted to fields that can be typed into (see, col. 12, lines 40-41). Validation functions can be added to each field to do basic data checking and validation at the client (see, col. 12, lines 44-45).

In contrast, amended claim 1 recites:

One or more computer-readable memories comprising computer-executable instructions that, when executed, direct a processor to perform acts comprising:

automatically identifying a custom field on a source code form definition, which defines a form to be generated, and one or more restrictions on an input to the custom field;

automatically identifying, on the source code from definition, a custom tag corresponding to the custom field, wherein the custom tag includes an indication of one or more attributes, and wherein each of the one or more attributes includes a value indicating what input corresponding to the non-custom field is to be restricted to; and

identifying, from a plurality of pieces of validation code, the validation code corresponding to the one or more attributes of the custom tag; and

adding, to a new form definition that includes a non-custom field corresponding to the custom field, the identified validation code

replacing the custom tag with a tag for the non-custom field and executable code to generate the validation code for the tag for the non-custom field.

Applicant respectfully submits that Raz does not describe the claimed “automatically identifying...a custom tag,” “identifying...the validation code,” or “replacing the custom tag.”

Raz discusses scanning paper-based forms and converting them to HTML documents using OCR technology (see, col. 12, lines 37-49). Raz also mentions that validation functions can be added to each field to do basic data checking and validation at the client (see, col. 12, lines 44-45). Raz simply mentions that validation functions can be added to each field, but does not provide any discussion or mention of how they are added or of how it is known what validation code is to be added. Without any such discussion or mention, Applicant respectfully *maintains*, as submitted in previous arguments, that Raz cannot disclose automatically identifying a custom field on a source code form definition and one or more restrictions on an input to the custom field, and automatically identifying validation code that, when executed, validates that the input conforms to the one or more restrictions as recited in Claim 1. However, as a cooperative gesture to advance prosecution of the present application, Applicant presently amends Claim 1 to include features previously recited in Claim 6, so that the

claim recites a custom tag being replaced by a corresponding non-custom tag and executable code to subsequently generate the validation code for the non-custom tag.

For at least these reasons, Applicant respectfully submits that amended Claim 1 is allowable over Raz.

Amended Claim 19, recites:

A computerized method comprising:

automatically identifying, from an input form definition written in a source code, one or more desired fields to be included on a form to be generated via which data can be input; and

automatically identifying a custom field tag corresponding to the one or more fields to be included on the form to be generated from the source code, wherein the custom field tag includes an indication of one or more attributes, each of which including a value indicating one or more desired input restrictions associated with the one or more desired fields; and

replacing the custom tag with a non-custom field tag and executable code to generate validation code to enforce the one or more desired input restriction in the one or more desired fields.

Applicant respectfully submits that no such method is disclosed in Raz.

Raz discusses scanning paper-based forms and converting them to HTML documents using OCR technology (see, col. 12, lines 37-49). Raz also mentions that validation functions can be added to each field to do basic data checking and validation at the client (see, col. 12, lines 44-45). Raz simply mentions that validation functions can be added to each field, but does not provide any discussion or mention of how they are added or of how it is known what validation code is to be added. Without any such discussion or mention, Applicant respectfully maintains, as in previously submitted arguments, that Raz cannot disclose automatically identifying, from an input form definition written in a source code, one or more desired fields to be included on a form via which data can be input, and automatically adding validation code to source code of the form as recited in amended Claim 19. However, as a cooperative gesture to

advance prosecution of the present application, Applicant amends Claim 19 to include features previously recited in Claim 20, so that the claim recites a custom tag being replaced by a corresponding non-custom tag and executable code to subsequently generate the validation code for the non-custom tag.

For at least these reasons, Applicant respectfully submits that amended Claim 19 is allowable over Raz.

With respect to Claim 43, Claim 43 depends from amended Claim 1, and Applicant respectfully submits that Claim 43 is allowable over Raz at least because of its dependency on Claim 43. For at least the reasons, Applicant respectfully submits that Claim 1 is allowable over Raz.

Applicant respectfully requests that the §102 rejections be withdrawn.

#### **35 U.S.C. § 103**

Claims 2-6, 20-24, 26-38, and 40-42 have again been rejected under 35 U.S.C. §103(a) as being unpatentable over Raz in view of Laura Lemay's Workshop JavaScript (hereinafter "Lemay"). Applicant respectfully traverses this rejection, and further requests that this rejection be reconsidered and withdrawn.

Lemay is directed to validating form data with event handlers (see, p. 132). This validation of Lemay refers to checking each field to ensure that it contains a proper value and advising the user if it is incorrect (see, p. 132).

With respect to Claims 2-6, Claims 2-6 depend from amended Claim 1, and Applicant respectfully submits that Claims 2-6 are allowable over Raz at least because of their dependency on amended Claim 1. Furthermore, the validating of form data with event handlers of Lemay is not cited as curing, and does not cure, the deficiencies

of Raz discussed above with respect to amended Claim 1. Although Lemay discusses validating form data with event handlers, nowhere in Lemay is there any discussion or mention of automatically identifying a custom field on a source code form definition and one or more restrictions on an input to the custom field, and automatically identifying validation code that, when executed, validates that the input conforms to the one or more restrictions as recited in amended Claim 1. For at least these reasons, Applicant respectfully submits that Claims 2-6 are allowable over Raz in view of Lemay.

With respect to Claims 20-22, Claims 20-22 depend from amended Claim 19, and Applicant respectfully submits that Claims 20-22 are allowable over Raz at least because of their dependency on amended Claim 19. Furthermore, the validating of form data with event handlers of Lemay is not cited as curing, and does not cure, the deficiencies of Raz discussed above with respect to amended Claim 19. Although Lemay discusses validating form data with event handlers, nowhere in Lemay is there any discussion or mention of automatically identifying, from an input form definition written in a source code, one or more desired fields to be included on a form via which data can be input, and automatically adding validation code to source code of the form as recited in amended Claim 19. For at least these reasons, Applicant respectfully submits that Claims 20-22 are allowable over Raz in view of Lemay.

Amended Claim 23 recites:

A computing system comprising:  
a processor, configured to generate;  
a form analyzer configured to automatically identify one or more custom tags in a source code form definition, which defines a form to be created; and  
a tag replacement module, coupled to the form analyzer, configured to automatically replace each of the one or more custom tags with another tag, and further to add, to a form definition, for each of the one or more custom tags, executable code to generate validation

code to validate subsequent inputs to a field corresponding to the tag in the form to be created.

Applicant respectfully submits that no such system is disclosed in Raz in view of Lemay.

Lemay is cited as disclosing the one or more custom tags in a source code form definition, and replacing each of the one or more custom tags with another tag, and a field corresponding to the tag. As discussed above, however, Lemay discusses validating form data with event handlers. Lemay also discusses HTML forms having validation (see, pp. 135-137). However, nowhere in Lemay is there any discussion or mention to automatically identify one or more custom tags in a source code form definition or to automatically replace each of the one or more custom tags with another tag. Without any such discussion or mention, Applicant respectfully submits that Lemay cannot disclose or suggest a system comprising a form analyzer configured to automatically identify one or more custom tags in a source code form definition and a tag replacement module configured to automatically replace each of the one or more custom tags with another tag as recited in amended Claim 23.

With respect to Raz, Raz discusses scanning paper-based forms and converting them to HTML documents using OCR technology (see, col. 12, lines 37-49). Raz also mentions that validation functions can be added to each field to do basic data checking and validation at the client (see, col. 12, lines 44-45). Raz simply mentions that validation functions can be added to each field, but does not provide any discussion or mention of how they are added or of how it is known what validation code is to be added. Without any such discussion or mention, Applicant respectfully submits that Raz cannot disclose to automatically identify one or more custom tags in a source code form definition and to automatically replace each of the one or more custom tags with another tag as recited in amended Claim 23. However, in a cooperative gesture to

advance prosecution of the present application, Claim 23 is currently amended to more explicitly indicate that the tag replacement module replaces the custom tags with corresponding non-custom tags and executable code to generate the validation code for each of the non-custom tags. Favorable consideration of such amendment is respectfully requested.

For at least these reasons, Applicant respectfully submits that amended Claim 23 is allowable over Raz in view of Lemay.

With respect to Claims 24 and 26-31, Claims 24 and 26-31 depend from amended Claim 23, and Applicant respectfully submits that Claims 24 and 26-31 are allowable over Raz in view of Lemay at least because of their dependency on amended Claim 23. For at least these reasons, Applicant respectfully submits that Claims 24 and 26-31 are allowable over Raz in view of Lemay.

Claim 32 recites:

A computerized method comprising:  
receiving a form definition, written in source code defining a form to be generated, including one or more custom tags, wherein each custom tag corresponds to a data input, and wherein each custom tag includes one or more associated input restrictions; and  
for each of the one or more custom tags,  
automatically identifying a replacement non-custom tag,  
automatically adding the identified replacement non-custom tag to a new form definition,  
automatically identifying validation code that, when executed based on an input corresponding to the tag, validates whether the associated input restrictions are satisfied, and  
automatically adding the identified validation code to the new form definition, such that a user input in a form created from the new form definition is validated.

Applicant respectfully submits that no such method is disclosed in Raz in view of Lemay.

With respect to Raz, Raz discusses scanning paper-based forms and converting them to HTML documents using OCR technology (see, col. 12, lines 37-49). Raz also mentions that validation functions can be added to each field to do basic data checking and validation at the client (see, col. 12, lines 44-45). Raz simply mentions that validation functions can be added to each field, but does not provide any discussion or mention of how they are added or of how it is known what validation code is to be added. Without any such discussion or mention, Applicant respectfully submits that Raz cannot disclose automatically identifying validation code and automatically adding the identified validation code to the new form definition as recited in Claim 32.

With respect to Lemay, the validating of form data with event handlers of Lemay is not cited as curing, and does not cure, these deficiencies of Raz.

Furthermore, as discussed above, Lemay discusses validating form data with event handlers. Lemay also discusses HTML forms having validation (see, pp. 135-137). However, nowhere in Lemay is there any discussion or mention of automatically identifying a replacement non-custom tag and automatically adding the identified replacement non-custom tag to a new form definition as recited in Claim 32. Additionally, Raz is not cited as curing, and does not cure, these deficiencies of Lemay.

For at least these reasons, Applicant respectfully submits that Claim 32 is allowable over Raz in view of Lemay.

Claims 33-37 depend from Claim 32, and Applicant respectfully submits that Claims 33-37 are allowable over Raz in view of Lemay at least because of their dependency on Claim 32. For at least these reasons, Applicant respectfully submits that Claims 33-37 are allowable over Raz in view of Lemay.

Claim 38 recites:

One or more computer-readable memories having stored thereon a text markup language document usable by a processor, the text markup language document comprising:

a first portion identifying an input field for a form; and  
a second portion identifying one or more restrictions on inputs to the input field, and further identifying validation code to be automatically added to a page to enforce the one or more restrictions on inputs to the input field.

Applicant respectfully submits that Raz in view of Lemay does not disclose or suggest one or more computer-readable memories as recited in Claim 38.

Raz at col. 12, lines 36-49 is cited as teaching the first and second portions of Claim 38. Raz discusses scanning paper-based forms and converting them to HTML documents using OCR technology (see, col. 12, lines 37-49). Raz also mentions that validation functions can be added to each field to do basic data checking and validation at the client (see, col. 12, lines 44-45). Raz simply mentions that validation functions can be added to each field, but does not provide any discussion or mention of how they are added or of how it is known what validation code is to be added. Without any such discussion or mention, Applicant respectfully submits that Raz cannot disclose a second portion identifying validation code to be automatically added to a page to enforce the one or more restrictions on inputs to the input field as recited in Claim 38.

With respect to Lemay, the validating of form data with event handlers of Lemay is not cited as curing, and does not cure, these deficiencies of Raz.

For at least these reasons, Applicant respectfully submits that Claim 38 is allowable over Raz in view of Lemay.

Claims 40-42 depend from Claim 38, and Applicant respectfully submits that Claims 40-42 are allowable over Raz in view of Lemay at least because of their dependency on Claim 38. For at least these reasons, Applicant respectfully submits that Claims 40-42 are allowable over Raz in view of Lemay.

Claim 25 has again been rejected under 35 U.S.C. §103(a) as being unpatentable over Raz in view of Lemay and further in view of U.S. Patent No. 6,832,369 to Kryka (hereafter "Kryka"). Applicant respectfully traverses this rejection, and further requests that this rejection be reconsidered and withdrawn.

Kryka is directed to the initialization of static data in object oriented systems (see, Title). In Kryka, a compiler for object-oriented programming code in a language which employs run-time static initialization semantics (such as the JAVA language) analyzes the static initialization code to find a subset of initialization statements which must execute under all conditions, creates an image of the static storage in which the variables initialized by statements in the subset are pre-initialized at compile time, and removes statements in the subset from the final compiled code of machine level instructions (see, col. 2, lines 44-53).

Claim 25 depends from amended Claim 23 and Applicant respectfully submits that Claim 25 is allowable over Raz in view of Lemay at least because of its dependency on amended Claim 23. Furthermore, the initialization of static data in object oriented systems of Kryka is not cited as curing, and does not cure, the deficiencies of Raz in view of Lemay discussed above with respect to amended Claim 23. For at least these reasons, Applicant respectfully submits that Claim 25 is allowable over Raz in view of Lemay and Kryka.

Applicant respectfully requests that the §103 rejections be withdrawn.

Conclusion

Claims 1-5, 19, 21-38, and 40-43 are in condition for allowance. Applicant respectfully requests reconsideration and issuance of the subject application. Should any matter in this case remain unresolved, the undersigned attorney respectfully requests a telephone conference with the Examiner to resolve any such outstanding matter.

Respectfully Submitted,

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